

Università Cattolica del Sacro Cuore

CENTRO DI RICERCHE IN ANALISI ECONOMICA
E SVILUPPO ECONOMICO INTERNAZIONALE

**EU Agricultural Policy:
the Concept of Multifunctionality
and Value Added Agriculture**

Valeria Miceli



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April 2005

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 segreteria.cranec@unicatt.it

www.vitaepensiero.it

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Abstract

Multifunctionality and value added agriculture are the European answers to WTO challenge to liberalize agricultural trade.

The second chapter provides a framework for the European Common Agricultural Policy. It presents an historical perspective and its main limits and challenges, in particular the current Doha round of WTO negotiations. The resulting reforms will be discussed.

The following chapters will deal with the answers elaborated by EU and implemented in its CAP reforms in order to make its agriculture to survive.

The main pillar of EU agricultural strategy is the concept of multifunctionality analysed in the third chapter. It implies recognition of the services (public goods/positive externalities) provided by farmers to justify public domestic support. The main elements in terms of interpretation and implementation of multifunctionality are provided along with the debate on its disguised use as a new form of protectionism.

The second EU answer to the challenges posed by agricultural liberalization is the maximization of the value of the output produced by farmers in order to increase their incomes. The instruments used to this purpose are denominations of origin (PDO/PGI) and labels for Organic Farming (fourth chapter); and rural tourism (the particular case of Italian 'agriturismo' will be presented) as a way to diversify farm activities and to create new sources of income and employment for farmers (fifth chapter).

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1 – Introduction

Agricultural trade is of particular significance for the EU, as it is the world's biggest importer as well as the world's second biggest exporter of agricultural products. The number of farmers and the cultivated area of the EU have grown considerably with the accession of the ten new Member States in 2004. The EU now includes some 11 million farmers. With enlargement, farm land has increased by around 30%.

For this reason particular importance has always been attached to European agricultural policy. The second chapter presents an historical perspective of Common Agricultural Policy (CAP) and of all the main reforms implemented over time. Currently the EU's approach in the agricultural negotiations is based on its Agenda 2000 package.

The EU is a member of the World Trade Organization (WTO). On 14th November 2001, a new round of WTO negotiations opened in Doha (Qatar). These ambitious negotiations reached an impasse in Cancun in 2003. On 1st August 2004, the 148 members of the WTO finally reached an agreement. As well as widening free trade, the multilateral negotiations reviewed existing trade legislation and extended it to new areas, while also expanding the trade capacity of developing countries.

The liberal paradigm imposed to all members by WTO rounds is not easy to satisfy in Europe for a number of reasons and can even cause most European agriculture disappear with all the consequences in terms of unemployment, disruption of rural life and traditions, breaking up of social cohesion, depopulation in marginalized regions, negative environmental impacts, loss of maintenance of soil and rural environment.

Which the European answer to this issue could be? How can Europe find the way to put together a competitive, sustainable

agriculture with the compliance to WTO requirements of free trade and the development needs of poor countries?

The European answer is comprised in the words 'multifunctionality' and 'value added agriculture'.

The paradigm of multifunctionality in agriculture has been introduced by EU as the specific feature of the European Model of Agriculture. EU position in WTO is based on this concept but also other countries including Norway, Switzerland, Korea, and Japan place substantial emphasis on the so-called non-trade concerns in the ongoing WTO negotiations and have submitted negotiating proposals to WTO going in this direction. The third chapter analyzes multifunctionality under an economic perspective, while the last two chapters analyze the value added agriculture based on the concepts of food quality and of trademarks/labels of origin.

2 –European Common Agricultural Policy

The European Common Agricultural Policy has been the biggest, the most contentious and the one with the largest budget of all the Union's policy areas. The EU has more power in agricultural policy than it has in any other policy area and it has passed more legislation on agriculture than in any other single policy area.

First efforts to stabilise agricultural prices in Europe before the Common Agricultural Policy began in 1920s and 1930s and by 1950s all six of the original EU members intervened in agricultural markets.

The European Common Agricultural Policy¹ was established with the Treaty of Rome in 1957 and continued until today with some attempts of structural reform that have taken shape since the '90s. According to the Art. 32 of the EC Treaty² "The common market shall extend to agriculture and trade in agricultural products. 'Agricultural products' means the products of the soil, of stock-farming and of fisheries and products of first-stage processing directly related to these products. [...] The operation and development of the common market for agricultural products must be accompanied by the establishment of a common agricultural policy." Reasons why one of the three common policies established with the European Community was just on the field of agriculture can be of social and economic nature. In the '50s it was still fresh the memory of war hunger and shortages, farmers were viewed as the guardians of tradition and cultural and historical values and it was important to foster social cohesion between rural and urban Europe. On the economic side agriculture accounted for 18%³ of workforce in EEC6 in 1950s. Moreover EU would reduce its dependence on imported food. Finally the trend for all developed countries was to try to protect and to support their farmers with subsidies/high prices

¹ In the rest of this work it will be named CAP

² Treaty of Rome, 1957

³ R.Baldwin & C.Wyplosz, "The Economics of European integration", 2003

because of the particular nature of agricultural activities and its fragility in the context of advanced economies.

When CAP was established its main objectives were the following as it is stated in Art. 33 of the EC Treaty:

(a) to increase agricultural productivity by promoting technical progress...;

(b) to ensure a fair standard of living for the agricultural community...;

(c) to stabilise markets;

(d) to assure the availability of supplies;

(e) to ensure that supplies reach consumers at reasonable prices.

As it is known, European Union was, at that time, a customs union. This allowed free trade within its borders while a strong protection towards the rest of the world was implemented through two kinds of instruments: border protection via very high tariffs on imported goods and internal support to farmers via maintenance of high level of administered prices.

2.1 CAP Main Problems

CAP's honeymoon came soon to an end because of a series of problems. First of all because of the accumulation of grain, beef and butter mountains due on one hand to the spectacular rise in productivity caused by the 'green revolution' and on the other one because of the incentives represented by CAP subsidies to increase production beyond any reasonable market limit. The consequence was that, acting EU as the buyer of last resort, the main solution being at the beginning to store the food, EU found itself the owner of wheat, beef and butter mountains (in 1985 it had 18.5 million ton of cereals stored⁴). When it was clear that exporting was one alternative to storing food, paying traders a subsidy to compensate them for the difference between world and EU prices, EU switched from being a net importer of most agricultural goods to the position of net

⁴ Ibidem

exporter, depressing world price of food and hurting the largest food exporting nations (US, Canada, Cairns Group) that became the main agents of pressure for an effective reform of EU CAP within the context of GATT negotiations.

Second source of troubles for the CAP was the inequitable distribution of its benefits among farmers. Subsidies were related to produced output so that they were disproportionately in favour of big farms with high levels of productivity: at that time 20% of the farmers got 80% of the benefits of the CAP⁵. Large farms produced a lot and they tended to be more efficient, their owners tended to be rich and benefits of CAP were systematically biased in favour of rich farmers (regressive effect). On the other hand spending power was redistributed from relatively poor consumer families to relatively rich farmers (regressive consumption tax) since higher prices are paid by consumers and food tends to be more important in the budget of poor families.

As third kind of problems, CAP caused also financial troubles because of the exorbitant incidence of support policies on EU budget. Buying the excess food or paying subsidies to exporters became so expensive that costs started to grow exponentially from 8% of total EU budget in 1965 to 80% in 1969 and the pace of cost rise was of 90% per year in the first 15 years, then was settled down to something under 10% per year and from 1974 to 1990, the budgetary outlays rose at an average of 7,6% per year in real terms (European Commission, 1994)⁶.

Fourth source of criticism is the fact that CAP has had a major impact in terms of industrialization of farming practices fostering processes of intensification and specialisation in the use of land with negative environmental impacts: deterioration of water quality, widespread use of pesticide and fertilisers, soil erosion, reduction of biodiversity, stock-farming practices that cause animal sufferings and diseases. While one of the main original CAP objectives was to foster rural development, to protect family farms (so important to the CAP's support among the wider public) and to

⁵ Ibidem

⁶ Ibidem

foster cohesion between rural and urban Europe, the most apparent achievements on this respect were to steadily reduce the number of small farms in favour of large industrialized farms that have risen greatly by the end of the '80s, to cause the vanishing of family farms weakening the tradition of rural life and to further deepen income imbalance between rural and urban society . The CAP in fact was not able to bring the reward of farming in line with the incomes of average EU citizens: in 1990 it was less than 40% of the income per worker in the EU12 economy as a whole⁷.

Finally a fifth order of problem was represented by the fact that EU, for the most part of its history, had not had a common currency. As a consequence, if the currency of one EU member, say Germany, appreciates and that of another, say France, depreciates, France that has 'cheaper' agricultural exports for Germany will flood the German market with wheat and German government will have to buy and stockpile the French wheat. This situation arose in the early 1970s when the Bretton Woods system of exchange regimes collapsed and most currencies started floating. Obviously the system became unmanageable. With the establishment of the single currency area this problem has been completely solved for that concerns EU15, but it can rise again after the last enlargement of the EU25.

However all the above mentioned problems were not sufficient to provoke radical reforms in the EU agricultural policy. Paradoxically the stronger impetus for deeper and more effective CAP reforms came from outside the EU and it is due to the pressures exercised by WTO rules and negotiation rounds.

2.2 EU CAP Reforms and WTO Negotiations

“A common agricultural policy that encourages surpluses which then have to be disposed of – again at considerable costs – is no longer acceptable or sustainable. Public expenditure must yield something in return – whether it is the food quality, the preservation

⁷ Ibidem

of the environment and animal welfare, landscapes, cultural heritage, or enhancing social balance and equity”⁸.

Already in the ‘70s, but mostly in the ‘80s, the urgency of CAP reforms was evident. The most obvious reform solution would have been to reduce agricultural prices where the most of the above mentioned problems stemmed from. This, however, was not politically feasible. Farmers’ political power was and still continues to be enormous. Large commercial farmers have gotten used to the extra billions that the high prices brought them. Moreover, they have invested in restructuring their farms and re-orienting their operations to focus on the goods most heavily supported by the CAP. Small farmers earned much less from the CAP, but without the higher prices, many would be driven out of farming altogether. Part of the farmer’s disproportionate power stemmed from the fact that average Europeans continued to approve the CAP’s support for farmers.

EU’s first reaction was to try to work around the problem, dealing with the surplus situation without fundamentally changing the price-floor system. In the period 1983 to 1991 the first attempts to deal with surplus situation and to lower agricultural prices were initiated but they were not enough strong to overcome farmers political influence. Between 1986 and 1988 some light reforms have been introduced: production quotas for dairy farmers, taxation of farmers when they exceeded specified output limits for all major products (maximum guaranteed quantities) and some other attempts to limit the cost of the CAP. Nevertheless problems had not been solved and the ultimate trigger for deeper and more effective CAP reforms came from outside the EU: pressures from GATT then transformed into WTO.

One of the main objectives of the WTO Uruguay Round in the field of agricultural negotiations was to reduce protectionist farm policies. Since WTO member countries, in particular the Cairns Group⁹, refused to reach an agreement on other sectors unless EU

⁸ European Commissioner Franz Fischler, 2002

⁹ The group of the largest food exporting nations excluding US and Canada: Argentina, Australia, Bolivia, Brazil, Chile, Colombia, Costa Rica,

agreed to substantial liberalization in the field of agriculture, strong pressures from European industries and export-oriented sectors finally overcome farmers lobbies and pushed to bring about CAP's reforms. Reforms were also boosted by pressures on EU agricultural budget.

The first reform to prepare the way to comply with the Uruguay round was the Mac Sharry reform of 1992. An agricultural agreement in the Uruguay Round (URAA) could not have been found without such a CAP reform. Through this reform a substantial cut of EU prices was defined in order to bring them closer to the world prices. It did not cover all agricultural sectors (only cereals, oilseeds, protein crops and beef) and was clearly far less ambitious relative to initial European Commission proposals as regards the reorientation of European agriculture towards meeting the long-run objectives of increased competitiveness and resource conservation. However it was a revolution since it implied a shift from market price support to direct payments borne by taxpayers. At that date, these direct payments were explicitly designated to compensate for the reduction in price support. For cereals, oilseeds and protein crops, farmers were entitled to claim an area payment while for beef, compensation was provided by a complex system of head age payments. Set-asides (reduction of farmed area in order to receive the payment) were defined in order to keep EU farmland in production without encouraging surpluses.

Later on, 2000 CAP reform was adopted in Berlin in March 1999. New objectives had been defined for the CAP: to ensure that European agriculture would become more competitive on both the domestic and world markets, more environmentally sensitive and that farmers livelihoods would be protected. Agenda 2000 represents a deepening (cereals and beef) and extension (milk) of the 1992 reform through further shifts from price support to direct payments still linked to production factors land or livestock. In addition, it defines a new framework for the EU rural development policy by bringing a series of measures together in a single package aiming to

Guatemala, New Zealand, Paraguay, Philippines, South Africa, Thailand and Uruguay

offer support to all rural areas. This integrated rural development policy is clearly presented as the second pillar of the CAP. However the encouraging rhetoric towards environment preservation and rural development does not really translate into increased budgetary commitments. In practice, the yearly amount available of about 4.3 billion Euro for financing the second pillar would not be significantly greater than the amount available in the six-year period 1994-99 for the same measures (through the European Agriculture Guidance and Guarantee Fund [EAAGF])¹⁰. Anyway it was the first time that rural development was explicitly and officially recognized as a second distinguished pillar.

In Brussels 2002, while having been asked to give an opinion to the implementation of Agenda 2000, the Commission went far beyond. The reform in object was considered not enough and the guidelines for another more revolutionary reform were given (MTR of July 2002). After 6 months in January 2003 the previous guidelines have been better defined addressing also the concerns arisen after the previous document of July 2002. In addition to a second reform proposal also a coherent position was submitted by the Commission in the same period to WTO negotiations (28th January) in order to comply with 31st March deadline to present a proposal on the so called 'modalities' for agricultural negotiations.

July 2002 and January 2003 proposals make up the so called Mid-Term Review (MTR) that is the last and no doubt the most radical CAP reform since the latter was established in the early 1960's. This is because the MTR finally achieves the shift from product to producer support by replacing all existing or newly introduced direct income payments, with a few exceptions, by a single decoupled payment per farm, based on historical references and conditional upon cross-compliance to environmental, animal welfare as well as food security and quality criteria. MTR tries to achieve the objective of full decoupling all direct payments and,

¹⁰ H. Guyomard and K. Le Briss "The Fischler's proposal for the CAP: paving the way for the future?" contributed paper presented at the International Conference *Agricultural Policy Reform and the WTO: where are we heading?* Capri, June 23-26, 2003.

severing the link between subsidies and production, to make EU farmers more competitive and market oriented, while providing the necessary income stability.

Revisions to the market policy of the CAP are also included in this package for that concerns the dairy sector (between 15% and 25% price reduction over four years) the cereals sector (50% reduction), rice, durum wheat, nuts, starch potatoes and dried fodder sectors.

In addition, the reform expands the scope of rural development instruments to promote food quality, meet higher standards and foster animal welfare, and it increases amounts available for rural development by transferring funds from the first to the second pillar via the introduction of an EU-wide system of digressivity and modulation.

This proposal has three real merits. First it redirects subsidies in a way that distort the international trade system a lot less and thus strengthens the EU's negotiating position in the ongoing WTO trade talks. Second, it would make farmers respond to the demands of the market rather than to the availability of subsidies. Finally it would make more likely spending money on goals that ordinary people genuinely support: safety and quality of food, protection of the environment, continuation of rural communities, preservation of rural values, tradition, heritage, landscape. Cross-compliance criteria used to attribute payments to farmers and the support and importance given to rural development policies are to be seen in the framework of the new European model of agriculture based on the concept of multifunctionality that will be better described in the next chapter.

This reform proposal has been hampered by some European nations, notably by France whose receipts of some €9 billion¹¹ a year in farm subsidies make it the largest single recipient of CAP funds. Anyway on 26 June 2003, EU farm ministers finally adopted the reform. In order to respect the tight budgetary ceiling for the EU-25 until 2013, ministers agreed to introduce a financial discipline mechanism based on the concept of digressivity of direct payments

¹¹ "Charlemagne", *The Economist*, 21-27 June 2003

(it means that direct payments must be reduced each year according to pre-defined percentages). The different elements of the reform will enter into force in 2004 and 2005. The single farm payment will enter into force in 2005. If a Member State needs a transitional period due to its specific agricultural conditions, it may apply the single farm payment from 2007 at the latest. The legal texts were formally adopted at the Agriculture Council of September 2003.

In 2004 CAP reforms continued concerning 'Mediterranean products' and sugar. In some Mediterranean farming sectors, like cotton and tobacco, the switch towards single farms payments is more delicate, due to the particularities of the crops or regions concerned. To assist these regions and crops, aid for restructuring has been made available. All sensitive crops, may keep some of the previous area aid (cotton and hops), or benefit from a lengthy transitional period during which area aids will still be permitted (tobacco). The Commission has also proposed a radical reform of the sugar sector. to reduce sugar exports and export refunds by removing intervention and capping Community production of sugar and its domestic price. The reform also provides for decoupled aid (separated from production) to sugar beet producers.

Finally CAP reforms have been adapted to take account of the entry of the 10 new Member States happened on 1st May 2004. Reforms concentrated on two points:

- o adapting the annexes relating to the CAP in the Act of Accession (by a Council Decision) to include the results of negotiations, integrating them into the new *acquis*;
- o adapting the texts reforming the CAP (with a new Regulation) to apply it to the new Member States, by including the results of those negotiations.

The approval of such reforms represents an essential and unavoidable step in order to strengthen EU position within the ongoing WTO trade talks, making it able to offer concessions on agriculture and to actively contribute to the progress in the current Doha round of negotiations.

3 – EU and the Concept of Multifunctionality

Multifunctionality in agriculture has become a catchword. Although it is a term that has evolved in the context of WTO negotiations, a precise definition has not yet been established. Debate on how to interpret and implement multifunctionality continues. In this chapter an attempt will be made to provide a reasonable and agreeable definition of this term. Some theories will also be presented on how to implement this concept.

Although the term multifunctionality is relatively recent, the concept is not new. It has already been proposed in 1960 by Johnson with its argument of a ‘scientific tariff’ to apply in order to achieve a set of non-economic objectives defined by society needs, three of which could be reasonably considered as part of the multifunctionality current debate. Subsequently other authors¹² used concepts that can be reasonably considered similar to some contents of multifunctionality. In the 1990s the term multifunctionality has been growingly used by the EU in the context of WTO negotiations for agriculture.

According to this view, agriculture is a particular sector that provides together with its main output of food and fibres, also national food security and safety, environmental benefits (cultural landscape, land conservation, flood control, increased protection against forest fires, biodiversity preservation, wildlife habitat, recreational activities), cultural heritage and viable rural areas. Farmers can be viewed as custodians of the countryside and guardians of rural cultural and social traditions.

Commodity and non-commodity outputs can be jointly produced. From an economic perspective, multifunctional outputs represent non-traded externalities of the food production process. Those non-commodity outputs are positive, non excludable and non rival: they represent a net benefit realized by society resulting from agricultural production. Therefore they exhibit characteristics of

¹² Bagwati and Srinivasan, 1969

positive externalities or public goods and they do not contribute to agricultural profits, hence farmers tend to under-provide them and this results in markets functioning poorly (market failures). In order to understand properly multifunctionality, the economic concepts of public goods/positive externalities/market failures should be analyzed.

According to neo-classical economic theory, under given assumptions (homogenous products, free factor mobility, full information, and zero transaction costs) the allocation of resources obtained in perfectly competitive markets will be Pareto-efficient. Government should not intervene in this process. Its role should only be to provide the legal infrastructure needed to make the system working properly that means to ensure private ownership and the rules of the game. But, there is also another case where public intervention is desirable or even required, and this is the case of market failures. Market failures, in an economy, may be caused by externalities, public goods, and economies of scale. A frequently used definition of externalities is that they are unintended impacts on other agents' production or consumption possibilities that are unaccounted for in existing prices or payment schemes. Positive externalities often have the character of public goods defined by two features: non-rivalry (consumption of a good by one person does not reduce the consumption available to anyone else) and non-excludability (once the good has been provided for one consumer, it is not possible to prevent other people from consuming it). According to the Arrow-Debreu vision, when goods have those characteristics, then the market does not properly function through the mechanism of pricing and it is said to be incomplete. This means that Pareto-optimality will not be reached letting the market working freely and we can recognize a case of market failure. To correct market failures, public intervention is required, but the mechanism of adaptation is quite complex. Policy instruments intended to address market failures can be summarized in the following three types:

1. Mandatory regulations
2. Financial/economic interventions by the public sector

3. Market creation for public goods/externalities

1) The adoption of mandatory measures is now conceived as an essential part of any policy package aimed at conservation of natural resources. It is made up by the framework of legally binding tools included in Constitutions and laws throughout Europe and encompassing property rights, regulations, environmental standards and licences, codes of practice and institutional plans for management of land. Forest laws, soil conservation and water management are well established examples. Obligations are conceived as a social commitment, and compensation is not generally considered. They have high administrative costs of policy implementation and monitoring. The last one becomes particularly relevant when social consensus is not widespread and administration is not well established. Another problem, particularly in marginal areas, is land abandonment due to lack of profitability.

2) Financial-economic interventions are positive voluntary tools aimed at convincing farmers to implement certain measures in exchange of various advantages. One type is compensation to meet costs increases/income losses to maintain certain types of land uses and to produce the related positive externalities. Another type is represented by fiscal incentives. There can be also other incentives and payments that include something more than simple compensation with the aim to stimulate participation in programmes with environmental objectives. Cross compliance that has been introduced in the European debate after the Berlin Summit in March 1999 can be considered as an indirect financial instrument since it links the concession of existing payments to the adoption of environmentally friendly techniques. The instruments included in this group, in particular those that have the nature of incentives, have been challenged in the international arena during the URAA and the Doha Rounds. They have been considered part of domestic support and, unless being considered not distorting of international trade (Green Box), they have to be dismantled.

3) The last type of policy is the introduction of marketability of positive externalities. It will be better analysed in more details in the next chapter. A concrete example of externality generated by

agricultural production is given by the cultural landscape: it confers benefits on all viewers of the landscape (non-rivalry) and at the same time, it is generally not possible to prevent people from appreciating an existing landscape (non-excludability). Public goods/positive externalities can be automatically 'produced' as a by-product of food and fibre production, without any additional costs, or they may require an extra-payment, otherwise they will not be produced, or will be produced in sub optimal quantities. Consequently, in a free market situation a positive externality/public good, as the cultural landscape, tends to be under-provided (below its optimum level).

Agriculture can provide both positive or negative externalities. According to some economists¹³, agricultural production may result in negative external effects, like nutrient runoff, soil erosion, and pollution from pesticide and herbicide use. This view is defined as the 'input model' and it postulates a negative relationship between output and environmental quality. Hence, according to this view, trade liberalisation can produce positive environmental effects (i.e. reduced pollution of soil, water and atmosphere, and increased biodiversity) since a reduction in the level of price support would lead to less intensive agricultural production methods. Most North American and Australian agricultural economists favour this model.

The second, although not necessarily conflicting model, is called the 'output model'. According to this model, marketed food and environmental quality can be seen as joint products that can be produced in varying combinations¹⁴. Many European and Japanese agricultural economists favour this second alternative. They expect increases in environmental benefits from policies leading to increased agricultural output. If the level of agricultural output is translated in terms of intensity of agricultural production¹⁵, then the possible trade-offs between rural environment and agricultural intensity can be represented as in Figure 1. As it can be argued, at low levels of output (intensity), agricultural output and

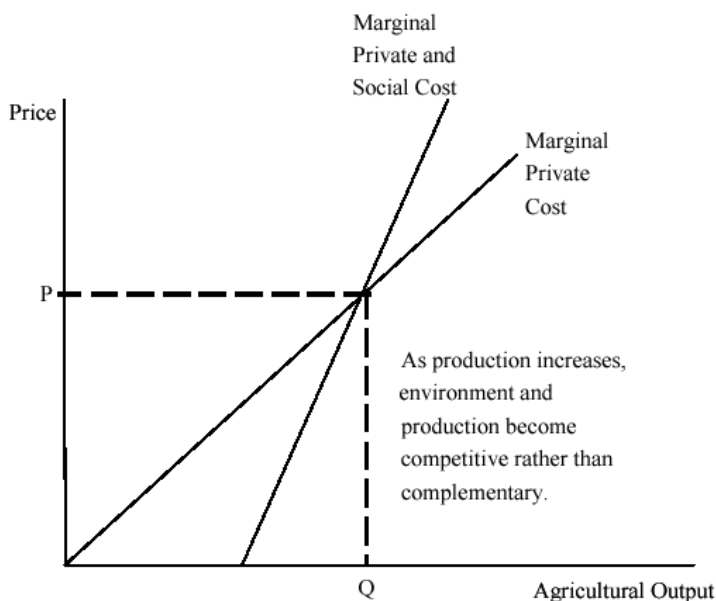
¹³ Buckwell, 1996; Ervin, 1997; Sumelius, 1997

¹⁴ Hodge, 2000

¹⁵ Hodge, 2000 and Harvey, 2002

environmental services are joint or complementary, which is shown as a positive externality in the figure. The marginal social cost of agricultural production lies below its marginal private cost. Beyond some level of output (intensity), agricultural production reduces the level of countryside services or the quality of the environment. This is shown as a negative externality: marginal social cost lies above the marginal private cost of agricultural production (figure 1). That is to say that as production increases, environment and production become competitive rather than complementary.

Figure 1 - Positive/negative externalities in agricultural production



3.1 Multifunctionality in European Terms

It is a fact that European society does care about the multiple functions of agriculture and therefore policies to ensure their supply have been established.

Agricultural activities contribute to achieve territorial as well as broad socio-economic objectives. Maintaining agricultural activities, in particular in remote or peripheral areas where there are few other possibilities of gainful employment, is important both to prevent de-population, the social and economic cost of which is high for society, and to ensure that human activities and presence are well-balanced throughout the territory. This objective is especially relevant in the European Union where rural areas cover over 80% of the territory and the density of population as well as the level of economic development varies significantly between urban and rural areas and among rural areas themselves. In addition, on average, the GDP per capita in the European Union rural areas is 8% to 30% lower than the national average with considerable variations between the different areas¹⁶. Indeed whereas some areas are integrated with urban centres and have a diversified economy, with farming still being the main user of the land, other remote rural areas have few possibilities of economic diversification or re-conversion, and agriculture remains the backbone of the local economy. More generally, agricultural activities and farm diversification can contribute to a balanced territorial development by maintaining the viability of rural areas and by preserving family farms.

More than any other human activity, farming has shaped the landscape of Europe and has influenced its culture, values, traditions.

The aesthetic, recreational and cultural value of rural landscape as shaped in centuries of history, the viability of rural areas, the preservation of cultural heritage and rural traditions, the provision of security and stability of food supply intended as the access to enough and healthy food even in times of crises, the maintenance of species dependant upon semi-natural ecotypes or wildlife habitat, the enhancement of the environment, maintenance of

¹⁶ Info-paper on Multifunctionality, October 1999

soil, flood and forest, and avalanche control can all be considered multifunctional outputs of European agriculture.

Could the same benefits be obtained with an entirely different usage of farmland, e.g. golf courses? In an Austrian study¹⁷, over 4000 tourists spending vacations in Austria were questioned whether a well-kept landscape was the decisive factor in spending a vacation in Austria and if farmers or other specialists should provide landscape-related services. 84% of the respondents answered that 'yes', landscape was a decisive factor in their vacation, and two-thirds voted in favour of the farmers as the providers of such benefits.

Multifunctional benefits have always been inextricably intertwined with agricultural activities in Europe much more than in any other parts of the world (US, Australia, etc)¹⁸. European society is well aware of its rural roots and values and of the fact that there are few alternative management regimes which can replace the benefits produced by farmers. If international and government policies reduce agriculture to merely areas competitive at world prices, the associated loss of multifunctional benefits may be substantial and may outweigh the gains from freer trade¹⁹.

After decades of farming policies and subsidies aimed at preserving agricultural self-sufficiency and founded on the need to stimulate an undercapitalised, peasant agriculture at a time of food insecurity, it is ripe for change. EU has grown into the world's largest player in the international food markets and European society needs a reform of its agricultural strategy. The purpose should be to move away from market price support into a system of support in which enhancing farmer's income should be not seen as an objective in itself, but as part of a broader policy intervention with the aim to allow farmers to play their full role as competitive providers of wholesome food and of public environmental goods and balanced rural development, correcting market failures and enhancing a multifunctional agriculture.

¹⁷ Pruckner, 1995

¹⁸ Buckwell, 1996

¹⁹ Hodge, 2001

Once the concept of multifunctionality has been absorbed among consumers that recognize it as a primary concern, it becomes a legitimate part of the debate on agricultural trade. In a context where its role is explicitly and legitimately recognized, then the central question arises on how to achieve the multifunctional goals that nations may have in a minimally trade-distorting way. This has also been the focus of the economic literature so far.

In the next paragraph an analysis will be carried out in order to formulate the policy instruments and to determine the proper level of support that could be accepted as minimally trade-distorting in implementing multifunctionality. Trade economists have suggested specific policy alternatives that address this issue through mechanisms that should be consistent with WTO objectives of identifying least-trade-distorting mechanisms.

3.2 Implementing Multifunctionality

One challenging aspect of multifunctionality is the implementation and discipline of a policy designed around its main characteristics that, at the same time, could be able to be integrated into WTO rules. The most significant role in the process of enhancing a multifunctional agriculture in OECD countries is for governments. Even if the need for public support can be reduced, public policies remain the main instruments in this field in both the forms, seen in the previous paragraph, of mandatory regulations and economic incentives for the adoption of specified actions. Just as a tax is widely accepted as the optimum policy for a negative externality, so should the use of a subsidy/payment be accepted as optimum policy for a positive externality/public good. According to this view, the provision of multifunctional services from agriculture can be considered the result of contracting of a government, that raises finance, with farmers who provide services. This fits with the two complementary principles of 'Provider gets Principle' and 'State Pays Approach' broadly adopted in EU agricultural policy. The question is how to design a programme for payments able to provide incentives for farmers to produce the optimum level of positive

externalities while, at the same time, ensuring a minimal trade-distorting impact on agricultural international trade. Before answering this complex question, a meaning should be given to the concept of non-distorting measure. It is in fact not very clear if, in case of market failures and unmarketable externalities, it is possible to still speak about non-distortion since the market, for the presence of those externalities, can be considered already distorted. If payments are made to farmers to correct for market failures, it is hardly logical to require that they should have no effect on production and trade.

There is an intense debate if there are real differences in terms of distortion on international trade, between related to production measures and fully decoupled payments. It is not very clear if WTO concerns on distortion of domestic subsidies related to production are well founded (this concern is embedded in the eligibility criteria for Green Box policies) and if the optimal solution can only be a single payment fully decoupled from production but linked to eligibility criteria (cross-compliance) as recommended by the OECD.

According to some authors²⁰, the simple rejection of the possible use of a production subsidy as a corrective measure in case of a domestic market distortion caused by a positive externality, is not consistent with economic theory. Probably this issue has more to do with political economy (and international politics) than with trade theory in itself. The objectives of multifunctionality in agriculture may admit some level of production-related support if countryside services are produced as necessary complementary joint products with agricultural production and their attributes are either impossible to separately identify and impractically difficult and costly to measure²¹. In this case output-related payments to farmers can represent the correction of a market failure rather than a distortion to trading relationships and, as a consequence, they should be treated as allowed support .

²⁰ Bhagwati, 1971; Ramaswami, 1998; Corden, 1997

²¹ Hodge, 2000

Depending on the actual degree of joint ness (or complementary) between agricultural production and the positive externality, the optimal subsidy could be a production subsidy (linked to output) possibly defined on a regional basis, but it may also be a subsidy linked to factors of production or otherwise linked to agricultural production processes. For externalities not jointly produced with agricultural commodities, such as hedgerows, stonewalls, water polls, streams, and specific habitats for wildlife and plants, farmers should be paid directly for the preservation and cultivation of these landscape elements in accordance with society's wants, i.e., the payments should be decoupled from agricultural production. On the contrary, in case of high level of joint ness or complementary between agricultural output and externalities, such as cultural landscape created by agricultural activities or viable rural areas, totally decoupled support would not be economic effective, the optimal subsidy would have to be a production-related subsidy eventually coupled with programs where farmers have to follow certain practices and to preserve the agricultural environment, to be eligible for these payments (cross compliance).

Other economists²², anyway, are highly sceptical towards this view and they claim that, even if there is joint ness, the payments for the provision of public goods should always be totally decoupled from agricultural production.

Different theories have been formulated in the economic literature to identify government policies able to attain multifunctional objectives in the least trade-distorting way: simple consumption model based on a demand framework²³; bargaining models on tax and amenities provision based on the assumption of

²² Bohman et al., 1999; Gaisford and Kerr, 2001

²³ S. Thornsby, C. B. Moss and A. Schmitz "Explaining Multifunctionality in Trade Negotiations: Valuing Non-Traded Commodities", contributed paper presented at the International Conference *Agricultural Policy Reform and the WTO: where are we heading?* Capri, June 23-26, 2003.

price transmission between world market and local markets²⁴; output models based on welfare analysis²⁵; models that provide insights to determine the optimal mix of policy instruments based on jointness in production and on regional differentiation²⁶. This work will focus on the analysis conducted by Paarlberg et al. (2002)²⁷. They demonstrate the admissibility, in some circumstances, of output-linked subsidies, trying, at the same time, to define a possible pattern to properly formulate such an intervention without transforming it in disguised protection.

3.3 A Model for Defining Output-Linked Subsidies

Paarlberg et al. have elaborated a model, based on Pareto Optimality criterion, to demonstrate that, in an open economy, policy intervention may be required in terms of production-related subsidy if agricultural and multifunctional outputs are jointly produced. Then, they have proposed conditions that must hold for output-linked subsidies to be considered Green Box policies by WTO. This proposal should represent a way to bridge national different views over multifunctionality in trade negotiations.

In order to demonstrate the first point, i.e. the need of output-linked subsidies in case of joint production, they elaborate a model based on the following assumptions:

²⁴ E. A Nuppenau “Multifunctionality, Taxing for Rural Amenities, and Non-Competitive Markets: Tradable and Non-tradable Goods in Political Economy Models”, contributed paper presented at the International Conference *Agricultural Policy Reform and the WTO: where are we heading?* Capri, June 23-26, 2003.

²⁵ Hodge, 1991, 2000

²⁶ Romstad et al., 2000

²⁷ M. Bredhal, J. G. Lee and P. L. Paarlberg “Implementing Multifunctionality”, contributed paper presented at the International Conference *Agricultural Policy Reform and the WTO: where are we heading?* Capri, June 23-26, 2003.

- social utility is a function of the consumption of a non-agricultural composite good made up by both agricultural goods *stricto sensu* and externalities which may be produced together with agricultural outputs;
- the marginal utility of consumption is positive, but decreases as the quantities consumed increase;
- the social function is atypical since it also includes externalities. Hence, agricultural production is viewed as a multi-product production process, which jointly provides commodity outputs and externalities;
- the externalities are positively linked to social utility: they can be defined as positive externalities;
- increases in agricultural output may increase the externality or decrease it, or leave it unchanged;
- a single production activity can produce multiple positive and negative externalities.

The optimal policy intervention is given by maximizing social welfare function subject to constraints. If the externality is positive, thereby it justifies a subsidy; if it is negative, it requires a tax; if it is zero no intervention is required. The relationship can change as output levels vary and as technology changes since the production technology employed can alter the relationship between levels of production and types of externalities generated.

The conclusions of this model can be summarized as it follows:

- a. multifunctionality never justifies trade barriers;
- b. multifunctionality may justify domestic output subsidies or taxes if the level of the externality is tied to output levels;
- c. the extent of support to domestic agriculture varies by nation;
- d. nations have the incentive to inflate the importance of multifunctionality to disguise protection, so strong disciplines must be negotiated.

When the existence of externalities justifies domestic subsidies, strong discipline is required among nations to reduce the risk of disguised protection and to improve transparency. This has

been translated by the authors in the following three conditions that must be satisfied to include subsidies in the Green Box support:

1. a nation must explicitly identify the externalities due to multifunctionality;
2. a nation must provide values of these externalities using standard market and non-market valuation techniques;
3. nations would be required to demonstrate the specific linkages among such externalities and the commodity output levels.

Each of the above mentioned points will be further analysed in the following sections of this paragraph.

1. Identification

Previous discussions on multifunctionality have been vague on the content of this concept. In order to set criteria to design and implement the appropriate policies, it is required more specificity in identifying the set of externalities and the services they provide and their relationship with current and alternative agricultural production practices and land use patterns. This operation involves difficulties in the determination of composition, scope and scale of the externality itself.

The first concern in this operation is to determine the appropriate level at which to set the policies, if supra-national, national or local. Rural environmental amenities typically have a national or local (regional) character and the social valuations may differ between regions and countries. Even within the same country, perceptions of multifunctionality may vary. For example the social valuation of rural employment is typically higher in more remote, sparsely populated areas of a country and this may become an argument for a policy to enhance a more low-intensive agriculture in these areas than elsewhere or for a more labor-intensive agriculture i.e. promoting organic agriculture. Therefore region specific valuation studies are needed to obtain the most accurate estimates of the economic values of multifunctional benefits. Across EU countries it is possible to find such different conditions and preferences, nevertheless this does not mean that agricultural policy

in Europe should be re-nationalized. The final aim always remains to pursue society's welfare as a whole. Hence, while the identification of externalities can take place at a local level, the formulation and implementation of the related policies should not be shifted from the national or supra-national to the local level.

Identifying with a certain degree of precision the multifunctional outputs of agriculture can result a very complex task for a series of reasons: different preferences among individuals generate perceptions of externalities that widely vary; externalities are usually bundled together so that it is quite difficult to separate their single elements, to weight them assigning percentages and proportions within the total; externalities can be conflicting depending on their nature or on the method of identification. Unambiguous solutions to those questions are difficult to find and they become even more complicated if, instead of considering closed economies, the context is represented by an open trading system where international spillovers exist and conflicting concerns between different nations are at stake.

Regarding the identification of externalities, two different approaches can be considered. A flexible one that attributes to the nations the right to identify multifunctional services basing on their social preferences. This approach presents the risk to provide the opportunity for nations to use multifunctionality as disguised protection. The other stricter approach leaves to the international organizations (WTO) the right to decide which externalities could be recognized and supported. This approach has the advantage of improving the level of certainty and clarity but presents the risk to limit nation's ability to provide appropriate levels of externalities. The former approach is supported by the European Union while the latter is preferred by those (US and Cairns Group) who fear that multifunctionality could become the way for a new form of protectionism. Probably the solution could be a middle way in which externalities are identified at a national or regional level, while rules and conditions to support them and the level of support could be set at an international level through the definition of an appropriate set of rules and disciplines.

2. Valuation

Once externalities have been identified, the next step for including their support into international negotiations is that of valuation. This process involves the solution to some critical issues: a) recognizing marginal versus total value; b) identifying the characteristics of externalities; c) selecting the valuation method most appropriate to those characteristics.

a) First of all the relationship between social welfare and the levels of externalities has to be determined distinguishing in particular between total and marginal social value. While the total social welfare is the relationship between the level of utility and that of externality, the marginal social welfare is the increase in social welfare due to one more unit of externality. This distinction is quite important in the phase of measurement to understand sign and magnitude of the relationships. There can be cases where more of the positive externality is always preferred to less (total social value increasing at a constant rate and marginal social value is a constant); other cases where the total social value increases at a decreasing rate (for example the case of water pollution); finally there can be cases where the total social value relative to the level of externality increases over an initial range, then declines and finally it becomes negative (for example cases of congestible externalities such as the case of increasing number of cows grazing on a hillside pasture). Other complications in this phase are due to the unit to choose for the measurement of the level of externality. This choice should depend on the type and nature of the externality, on the geographic scale and time frame considered for the evaluation. The unit of measure depends also on the technique of evaluation. Alternative techniques that can be used in the valuation of multifunctional goods will be described in the next section.

b) Second issue is identifying the nature of multifunctional goods and services. Nature of goods can be described through three main characteristics: excludability (it relates to the ability to exclude others from the use or benefit of that good, i.e. market goods are exclusive), rivalness (the consumption from an individual excludes

the consumption from others) and congestibility (if goods can be associated with multiple users without decreasing their utility and to what degree). As far as these characteristics are quite low (non-exclusive, non-rival, non-congestible), the good can be considered a pure public good, while if a good is highly exclusive and rival this is a typical market good and the proper valuation method is through market pricing. Externalities contain varying degrees of the characteristics. However, as it has already been explained in the first paragraph, the vast majority of multifunctional goods and services tend towards the public good definition. Identifying the nature of specific externalities is important in the valuation process since it helps in the selection of the proper valuation method.

c) Finally, after having identified the nature of the multifunctional good, the appropriate valuation technique has to be chosen. When determining the appropriate level of agricultural support, it is of importance to try to estimate how much society is willing to pay for multifunctional goods and services provided by agriculture. Since the vast majority of multifunctional goods can be considered as public goods, the market pricing method can not be considered as the most appropriate and particular valuation techniques such as hedonic, travel cost or contingent valuation methods will be required. Hedonic and travel methods are based on revealed preferences, while the contingent method surveys directly the user's willingness to pay for positive externalities/public goods related to agriculture.

The hedonic price model relies on market price observations and decomposes the value of the good into its different attributes. It is usually applied for land and real estate and can also be applied to the demand for natural resources and amenity values. Its strength is its foundation on observed market transactions, but this implies also some limits. The most important is the risk to underestimate the total social value of a resource because of its focus on market attributes. This risk is particularly evident for goods non-rival in consumption. An alternative to the hedonic pricing method is the replacement cost technique which uses estimates of replacement costs to determine the value of selected externalities. This method is most often used to

estimate the damage associated with negative externalities (soil erosion), but it does not take into account option and existence values and in addition, some externalities, once they are lost, can not be replaced. Therefore its application to a broad range of multifunctional goods may be limited²⁸.

Another method of valuing non-market goods is the Travel Cost Method (TCM). This technique determines the value of multifunctional goods through users' willingness to pay measured surveying on-site users to determine the distance and time they travelled as well as the number of trips they are willing to make. This information combined with per mile and per hour costs gives, as a result, the travel cost estimate that each user is willing to pay to enjoy the multifunctional good considered. This technique has been mostly applied to determine the value of recreational sites. Its limit is due to the fact that only on-site users are surveyed (no zero use observations are collected), the trip or trips to a given location often are not single purpose (trips may include stops at multiple sites) and, given its on-site nature, it may be possible that the number of trips or the number of visitors per day do not accurately reflect the quantity, variability, and time period or periods over which on-site users are interviewed.

The most used method, and probably the most appropriate to test user's willingness to pay, is the Contingent Valuation Method (CVM). It is based on individual responses to contingent circumstances where a monetary measure of willingness to pay (WTP), willingness to accept (WTA) or willingness to avoid (WtoA) is expressed directly by the users through surveys collected by telephone, mail, internet. These methods include payment card, interactive bidding, and dichotomous choice. In the first method the interviewee is asked to select a given monetary interval from a set of payment ranges. In the case of interactive bidding, the interviewee is

²⁸ Similar to the previous mentioned techniques, there are others such as price of substitutes that uses the market price of a similar market good or entry fees technique to provide data for estimate the value of a specific experience through the potential fee chargeable on the user. It is not within the scope of this work to go into more details on each of these techniques.

asked what they would pay for a particular good. Based on the response, the surveyor provides the interviewee with higher or lower values until convergence to a specific value. Dichotomous choice involves a yes or no response from each individual of whether they would be willing to pay a specific amount for a good. While each person interviewed responds to a single value, by surveying many individuals exposed to a broad range of monetary values, the researcher can estimate the aggregate demand function for the good. This method has been widely used for numerous types of multifunctional goods²⁹ and it results particularly suitable for valuing non-rival and non-exclusive goods associated with agricultural production. Although this method has been extensively used, nevertheless it has also numerous limitations. It is difficult to determine people's real value of public goods through investigations on the willingness to pay because of different reasons: market consumers lack of experience in valuing non-market goods; the free-rider problem and also the elicitation method, information and phrasing in the survey that affect the declared user's willingness to pay.

At the end of all the valuation process, the final aim is to quantify the value attributed by society to the positive externalities/public goods in question in terms of society's willingness to pay (WTP).

3. Linkages to Output Changes

The last element to take into account to determine the appropriate level of output-linked subsidies in case of positive externalities related to agricultural production, is the relationship between the externality and a change in agricultural output. If such relationship does not exist at all, the existence of a production-linked subsidy can not be justified. Being so crucial within the whole process, this step needs particular careful, but at the same time this linkage may result quite difficult to define, measure, and value empirically. The relationship between agricultural output and

²⁹ Drake, 1992 elaborated estimates for landscape preservation in Sweden

externality can be discontinuous. In addition changes in technology and input substitution can alter the link and even the source of the externality. Finally the spatial and temporal location of agricultural activities can influence the set of externalities produced.

Once multifunctional goods have been identified, evaluated and the linkage with output has been established, conclusions can be drawn on the best policy to address multifunctionality in agriculture. The logical conclusion being that, if externality's value turns out to be rather low, public intervention to correct for these benefits may not be justified unless the costs of such intervention are quite low. Or, if no linkage exists at all with agricultural output, no subsidy output-linked payment can be accepted, but other forms of incentives have to be found. If instead, the multifunctional products of agriculture are highly valued by the society that shows a high willingness to pay for them and a precise and foreseeable link between agricultural output and multifunctional good can be established, then the optimum policy can be to set a programme of output-linked payments/incentives even if it implies high costs for the society.

3.4 Multifunctionality and Trade Negotiations at WTO

At the beginning of the Doha Round even the inclusion of the concept of multifunctionality as a negotiating item was likely to be contentious. Over time, the policy debate has shifted from a focus on legitimacy of the multifunctionality concept to a more specific focus on how such a concept might be effectively implemented and governed.

The EU, Japan, Korea, Norway were prominent supporters of multifunctionality concept. EU position in the WTO is based on the assumption that environmental quality and sustained viability of rural areas are essential components of any continued agricultural negotiations. Japan underlines the importance of food security at a national level and defines agriculture as the foundation of society arguing that such a foundation cannot be sustained through market

mechanisms alone. Those countries call for an extension of the level of support actually provided by the Green Box. While the US have softened their position after the passage of the 2002 U.S. Farm Bill and can accept the actual level of Green Box exemption, there still remains a group of countries, mostly agricultural exporters (the so called Cairns Group), sceptical about allowing explicit compensation for non-traded goods. They remain strong opponents to the concept of multifunctionality and support the idea that agriculture should be treated as any other good and subject to the same rules by WTO. Multifunctionality continues to be seen by those countries as a new form of protectionism in world agricultural trade, as a cause of distortion in the allocation of resources, having the potential to change competitiveness of regional farming sectors and contributing to conflicts in regional and international food markets. The proof of this reasoning should be represented by the fact that this type of support is mostly put forward by food importing countries and farming lobby groups that would conceal non-competitive sectors.

Like any other market intervention, multifunctionality could have as result to move the global economy away from a perfectly competitive outcome. However, in the past, WTO members have already agreed on trade restrictions in the presence of externalities (SPS Agreement). Sovereign countries have the right to decide upon their own agricultural objectives regarding non-trade concerns such as food security, cultural landscape, land conservation, biodiversity, recreation, cultural heritage, animal welfare, and viable rural areas. In order to enhance a multifunctional agriculture Green Box criteria should be widened to include the use of production-related support/payment programmes. In order to reach a compromise with other international actors, subsidy payments could be subject to quantity limits. For example, headage payments could be based on a fixed maximum number of animals and acreage payments on a fixed maximum area planted. These support measures/payment programmes should be notified to the WTO, so that other countries can evaluate them.

Since rent seeking behaviours are quite difficult to identify, to discipline and to sanction, WTO rules should be carefully defined

and tightly prescribed, to prevent such policies from becoming a form of protectionism.

The purpose of multifunctionality should not be seen with suspicion, but as part of a broader policy intervention with the aim to allow farmers to play their full role as providers of high quality food and of public environmental goods and balanced rural development, correcting market failures and enhancing a multifunctional agriculture.

4 –EU and Value Added Agriculture: Designations of Origin and Organic Farming Label

Adding value to European agriculture means increasing farmer incomes through:

- o The maximization of the value of the output they produce and the creation of monopoly rents through trademarks and labels (quality-discriminating agriculture and organic farming). This solution is analyzed in this chapter.
- o The creation of other farm output-related services to be sold to consumers along with multifunctional agricultural output (agri-tourism). The second solution is presented in the following chapter.

The challenge is to make this concept acceptable at international level within the context of WTO negotiations on agriculture.

4.1 Consumers' Concerns about Food Quality/Safety and WTO Requirements

One of the main purposes of value added agriculture is to enhance the income *earned* by farmers. This can happen because the food system shifts away from broadly defined commodities to products with differentiated characteristics that add value when product identity can be preserved. This fits with consumers' increasing concerns about the quality and safety of food they eat. In recent years this concern has gained additional prominence especially in the industrialized high-income countries but also among higher income consumers in less wealthy countries. Consumer focus on food safety has been sharpened by the greater public awareness of food-borne diseases both new ones ('mad cow') and old ones (food-borne pathogens, pesticides, hormones, etc...). At the same time consumers are increasingly interested in knowing more about how their food is produced and in selecting products based on production practices (whether food is produced using modern bio-technology,

whether it is organically produced; how animals are treated in meat and egg production systems; whether it is produced using traditional or artisanal methods). Both consumers and farmers have turned to government for policies to meet demands for safety, to provide information about quality and production processes and to facilitate trade: many national governments are reforming or have already been reformed their food safety institutional structures and regulatory frameworks.

What does it happen when we take in consideration also international trade in this scenario? International trade benefits consumers making food more affordable and addressing the demand for variety. At the same time trade may threaten the ability of consumers to purchase the products they want because imported products risk to be less safe, produced in undesired ways (using hormones for example) or they do not meet other quality standards. So international trade represents both an opportunity and a challenge for consumers and the questions arise on a) what impacts domestic reforms in food regulation may have on international trade and b) how well the global food trade system serves consumer demand for quality. The risk is that consumers' concerns about quality will be exploited by farmer lobbies to promote policies regarding imports that are protectionist and pose barriers to trade rather than provide legitimate consumer protection. The crusade for quality and safety will then risk to be transformed into a new form of 'protectionism' that of the 21st Century type made up of trademarks, copyrights, brands.

WTO looks at scientific risk assessment as an impartial and decisive arbiter of legitimate and illegitimate measures. It imposes strict disciplines through the Sanitary and Phyto-Sanitary Agreement (SPS), the Technical Barriers to Trade Agreement (TBT) and the TRIPS agreement. Barriers to imports have to be based on scientific grounds³⁰. Art. 5 of the SPS Agreement requires that countries base SPS measures on available scientific evidence of risk to plants, animals or humans and those measures can not be more trade

³⁰ Annex I of OECD 1999 and the WTO Dispute Settlement Body

restrictive than necessary to achieve the desired level of health protection. SPS agreements can be considered having worked fairly well until now with respect to each of its major principles: Transparency, Scientific Risk Assessment, Equivalence and Harmonization³¹. Two trends create continuing challenges for the SPS agreement. First, regulation of food safety, animal, and plant health is evolving rapidly in developed countries creating the potential for convergence around higher standards. Second, non-traditional agricultural exports from less developed countries to rich countries, particularly of fresh and minimally processed products, are growing rapidly. Some of these commodities in particular, such as seafood and tropical fruits, raise concerns since such products frequently have high risks for certain kinds of SPS hazards, which may be exacerbated by trade over long distances.

Conflicting interests are at stake. Addressing consumers concerns on quality in rich nations conflicts with development issues in poor countries and with commercial interests of large exporting nations. In addition regulations of industrialized countries are becoming stricter and are expanding into new areas. Because of huge differences among consumers in income, tastes, risk preferences, geography, culture and religion, regulations and standards between developed and developing countries is even greater. The limited ability of some developing countries to detect and control the safety of their products has been used as a motivation to ban imports especially by the EU and the US. Consumer's organizations emphasize cases of sanitary problems caused by imports in order to demand strengthened border control and a revision of the provisions of the SPS Agreement.

As developing countries work to meet higher and evolving food safety standards, they have raised concerns about whether such standards will marginalize their participation in world trade posing

³¹ For more details see L. Unnevehr and D. Roberts "Food Safety and Quality: Regulations, Trade and the WTO" contributed paper presented at the International Conference *Agricultural Policy Reform and the WTO: where are we heading?* Capri, June 23-26, 2003.

challenges to the SPS Agreement and to the efforts to reduce barriers to agricultural trade.

When challenges are faced with a positive proactive attitude they could even turn into development opportunities for the farming sector in poor countries as the case of Uruguayan beef exports to the EU³² demonstrates. Uruguayan public and private sector have worked together to position the beef industry favorably in order to expand exports to the European Union. The EU ban on imports of beef produced with hormones and the requirement of traceability of products turned to be into an opportunity for Uruguayan producers. The reliance of the Uruguayan industry on pasture grazing systems and the establishment of the *Dicose* system for traceability, produced beef consistent with European demands. In addition, the pronouncement of Uruguay as free of foot-and-mouth disease in 1995, based on sanitary improvements, also promoted the export potential of the industry. Efforts were also have been made from cooperatives to offer incentives to producers to go beyond the base quality requirements. This case study shows how the public and private sectors in a developing country can work proactively to augment exports in order to turn those that appear as restrictions into market opportunities and it also demonstrates that EU citizens concerns on food quality and safety are not necessarily conflicting or incompatible with development needs of poor countries.

Beyond the successful cases, a larger number of complex ‘problem cases’ have emerged and a number of disputes related to sanitary and phyto-sanitary measures have already been brought before the WTO. With the strengthening of international rules, increased trade in agro-food products and growing domestic pressures to address consumer demands for quality, trade conflicts over food regulatory issues could become more common threatening to arrest the dynamism of the international trading system. Indeed WTO rules are forcing policy changes that are difficult to accept and implement since they regard areas where governments find it extremely difficult to dismantle measures considered offending by

³² M. Marshall, M. Boland, D. Conforte and D. Cesar “A case study of beef production and export in Uruguay”.

the international community but that are domestically endorsed by consumers and sustained by internal public support, both in the case of legitimate (food quality and safety) and illegitimate concerns (protectionism). It is quite difficult to find a balance between socio-economic concerns within the food safety regulatory system and the compliance with international trade rules. Measures can not result in discrimination or disguised protection, but at the same time they should be compatible with consumer concerns on quality and safety in order to avoid weakening support for trade liberalization from public opinion.

Despite the intent in the Uruguay Round to provide a durable multilateral framework to discipline the use of food safety and quality regulations, proposals submitted by countries both leading up to and following the Doha Ministerial Conference in November 2001 indicate that a remarkable divergence of views has emerged about this framework. EU, Japan, Switzerland argue that the adequacy of current WTO rules has been called into question by new production technologies, new disease outbreaks, and new demands for credence attributes by consumers and they call for rules that give governments more latitude in the regulations of risk and differentiation of products for the benefit of consumers. They favour the explicit recognition of the legitimacy of the precautionary principle in the interpretation of the SPS agreement. In addition EU requires mandatory labelling for production and processing methods for food and agricultural products such as designations of origin and geographic denominations, eco-labelling of forestry products, traditional expressions for wine and spirits, and other labelling regimes. Opponents such as US, Canada, Australia and New Zealand see mandatory labelling of production processes as an unnecessary technical barrier to trade. Developing countries signal frustration with the increasingly exigent standards faced by their exports, making it still more difficult to gain access to developed country markets.

Every nation, even if WTO member, has the right to determine what level of sanitary protection it considers appropriate within its territory, but the objective of minimizing negative trade

effects must also be taken into consideration and attention should be paid not only to domestic considerations but also to international issues.

4.2 An Economic Framework for Analysing Food Quality and Trade Issues

The use of an economic framework in the food quality area can help in defining criteria based on the economic impacts - from the point of view of global welfare –to distinguish measures aimed at correcting market inefficiencies from those that are designed to erect non tariff trade barriers and protect local interest groups.

From an economist's point of view, the main legitimacy of international trade lies in the effectiveness of trade to increase the well-being of citizens. Usually non tariff barriers are considered as instruments that decrease potential world welfare but if there exist cases where trade could involve some negative effects that could at least offset the positive consequences of trade liberalization, then economic analysis should assess whether a measure falls into this category. In this sense the economic analysis could help governments and international organizations to detect measures that improve global welfare even if reduce trade and that can be accepted as legitimate.

Product attributes

The term 'food quality' has many meanings. Within this concept are included sensate attributes such as taste, smell, appearance and texture. Are also included health and safety attributes such as nutritional content, therapeutic benefits and freedom from pathogens and contamination. Product origin, either with respect to geographic location or production practices, is another dimension of a broader concept of food quality.

Economic models assume that products quality attributes can be based on whether buyer information about quality is of a search, experience or credence nature. Search goods are products for which consumers can obtain information to judge quality prior to purchase;

experience goods are those for which quality can be judged after purchase and use; and credence goods are those for which quality can not be accurately judged even after purchase and use. In general, there is no one-to-one mapping between a particular attribute and whether it is of a search, experience or credence type. For example contamination of a food product with food borne pathogens may be an experience attribute if the consumers becomes ill, but a credence attribute if he or she does not. It is also important to emphasize that the category of an attribute depends also on the ease or difficulty (cost) of obtaining information, which can be altered by changes such as new technology or labelling.

Different attributes of products in terms of safety, taste, integrity, freshness, nutrition, affect consumer's utility. At the same time consumer satisfaction or dissatisfaction depends not only on product's attributes but also on the way it has been produced in terms of animal welfare, authenticity of process/place of origin, traceability, biotechnology, environmental impact, worker safety, etc. This latter type of characteristic is of a credence nature.

Vertical and horizontal differentiation

Economic theory addresses the issue of product quality mainly in terms of differentiated products. We should distinguish between vertical and horizontal differentiation³³. If quality is vertically differentiated, all consumers share the same quality ranking. If alternative products with different levels of a quality attribute were offered for sale at the same price, all would buy the same product with the level of quality they view as superior. If quality is horizontally differentiated, consumers would have different quality rankings and would choose different products with different quality attributes if they were all offered at the same price. Vertical differentiation refers to a concept of quality *stricto sensu* while horizontal differentiation refers mainly to a concept of product variety. Whether a product attribute refers to vertical or horizontal differentiation depends on consumers' structure of preferences that

³³ Sutton, 1991 for an extensive discussion

vary across countries. The introduction of product differentiation in the theory of international trade has not contradicted the traditional arguments for trade liberalization. The fact that country specialization according to comparative advantages leads to lower prices has not been challenged: for a given level of expenditure, freer trade allows for the possibility of consuming the same amount, but a higher quality, of products (vertical differentiation) while horizontal differentiation increases welfare through increased product variety. According to the classic theory, trade competition encourages firms to offer a better quality-price mix while regulatory barriers to trade typically result in a restriction on consumer choice in the available quality segment so a proportion of the population may be deprived of the opportunity to consume a cheaper but lower quality products and the global welfare will decrease.

Nevertheless the beneficial effects of trade liberalization may be attenuated by market inefficiencies limiting the scope of the welfare theorems which are implicit in the standard legitimisation of trade liberalization. In cases of imperfect competition and imperfect information it is possible that the introduction of regulatory barriers, even if restricting international trade, may result in an increase in the global welfare. There may exist some situations where trade liberalization could have possible adverse effects on consumer's welfare³⁴. For this reason could be acceptable that countries protect their markets in order to improve their society's utility. The issue is how to find the appropriate measure of protection that permits to improve total welfare without resulting in disguised protection.

Imperfect competition

As a general case, imperfect competition does not provide incentives for supplying social optimal quality. A monopoly firm will in general seek to limit the quantity on offer and will usually set the quality on offer at an undesirable level so the quality choice will

³⁴ J. C. Bureau, W. Jones, E. Gozlan and S. Marette "Issues in demand for quality and Trade" in *Global Food Trade and Consumer Demand for Quality* edited by Krissoff et al., Kluwer Academic/Plenum Publishers, New York, 2002

be less than optimum from the society point of view. This in order to maximize the firm's private profit.

However, by increasing competition, trade liberalization may sometimes have a negative influence on the quality on offer. Greater competition may result in certain quality segments not being supplied at all or in an overall decline in quality on the market. When firms have fixed costs, it has also been shown that greater competition can cause producers to set quality levels further removed from the socially optimum level in order to limit a fall in profits³⁵. *Ceteris paribus* by increasing competition in an industry, freer trade could encourage quality-cutting or fictitious mechanisms, especially if consumers track prices more readily than quality (e.g. the case of credence goods) or when there is a negative correlation between the quantity of output and quality (e.g. in sectors where quality depends on restricting yields). Situations where any adverse effect on quality caused by excessive competition lead to sub-optimal levels of quality differentiation, as a result of the opening up of the borders, outweighing the benefits of trade liberalization, are not so usual. Nevertheless cases of quality-cutting competition are possible and in those cases it can be considered legitimate to erect barriers for the domestic regulator.

Imperfect information

If consumers are not fully informed about product characteristics, the level of welfare in society may be lower than under perfect information. Relying on an expected quality rather than on a given certainty, affects consumer behavior in negative ways (adverse selection effect) while the vendors may offer an inadequate level of quality giving place to moral hazard behavior on the part of supply. In both cases imperfect information has a cost for the society. The most widely known case is the classic 'lemon' effect described in Akerlof's famous example³⁶ of poor quality chasing away high quality on the second-hand car market. When consumers are not able

³⁵ Reitzes, 1992

³⁶ G.A: Akerlof (1970) "The market for lemons: qualitative uncertainty and the market mechanism", *Quarterly Journal of Economics*

to distinguish the specific quality of different products, they are not willing to pay as high prices as they would if they were sure that the product was of high quality. The extreme consequence is to cause the total disappearance of trade in the case where buyer willingness to pay is insufficient to cover production costs. If, instead, buyer willingness to pay is less than the cost of producing high quality goods, the latter will disappear from the market and only low-quality goods will be traded.

Some authors³⁷ have applied this framework to EU agriculture and have investigated the mechanisms of adverse selection in the case of the EU ban on hormone-treated beef. The case is on trade liberalization that determines imperfect consumer information on quality, leading to a decrease in consumption. According to this case, imperfect information has important empirical implications. First, trade liberalization may result in a situation where goods perceived as low-quality products drive high-quality products out of the market. When consumers are reluctant to eat the only goods supplied on the market this results in a decrease of a public satisfaction and utility. In some cases the aggregate values of the two countries presented in the model could even be lower under free trade than under autarky, since the welfare losses of the importing country could exceed the welfare gains of the exporting one. Second, the possibility of multiple equilibria caused by asymmetric information could increase uncertainty on the market, and producers may not know which equilibrium price will prevail in the future. In theory, it is possible that trade liberalization involves either welfare gains or losses for a given country in a somewhat unpredictable way.

To alleviate market inefficiencies due to imperfect information vendors may signal the quality of their products. For experience goods this signal may be conveyed by price³⁸. For experience goods, consumers repeat their purchases over time, drawing lessons from the quality of the goods they bought in the previous period. In a vertical differentiation framework, quality is an

³⁷ Bureau, Marette and Schiavina, 1998

³⁸ Shapiro, 1983

attribute that can be verified and imperfectly informed consumers are willing to pay a higher price for higher quality. A higher price than the perfect information case could encourage producers to offer high quality on a lasting basis in order to preserve their reputations. Incentives for maintaining reputation rather than giving up to quality at a certain point in time require a positive price distortion in the second period. The price supplement constitutes the information rent, which enables quality to be maintained over time and creates an incentive not to cheat on quality. It informs consumers of the quality of the products they buy. It is apparent that there is a cost for the society in comparison with a situation of perfect information, since consumers have to pay the higher price needed to signal quality. This cost has to be taken into account when assessing the overall impact of trade on welfare.

In the context of international trade, consumers may have imperfect information on the quality of imported goods sold in the domestic market. If we assume that foreign producers benefit from a lower production cost for low-quality goods, while domestic producers are more competitive in high-quality goods³⁹, opening the market to imports would result in a decrease in price for the lower quality segment and it will affect the price distortion that is necessary to signal high quality. Now suppliers have access to a cheaper low quality that they could sell at a high price if they decide to cheat with quality. The incentive for maintaining their reputation has decreased compared with the autarky case. International trade, according to this model, has two different effects. It decreases the price of low-quality segments increasing consumer's welfare in that segment, but the increase in price in the high quality segment – which is detrimental to consumer's welfare – can result in an overall decrease in total welfare.

The above described case could be challenged. In the same context of adverse selection, in the case where a developed country with a high level of food safety opens its borders to a country lacking infrastructure or skills for testing the safety of its exports⁴⁰, the

³⁹ Falvey, 1989

⁴⁰ Bureau, Gozlan and Marette, 1999

pressure from imports of uncertain quality may result in a higher safety effort from domestic producers in order to differentiate their products from imports. In this case international trade liberalization, by increasing the contestability of the market, provides incentives for signalling product quality. It creates conditions under which the northern producer has more incentive to position itself as a high-quality one and to systematically inform consumers. Trade liberalization might have positive effects on welfare in the importing country because of informational aspects. This result however only holds for experience goods, not for credence ones, nor it is valid when the southern producer has a much lower marginal cost than the northern which would offset the information advantage.

All the models presented so far refer to experience goods, but do not work with credence goods since in this case repeated purchases do not bring consumers any additional information thus not providing any incentive for producers to offer high quality. With credence goods there is no spontaneous mechanism for market regulation and it is more difficult to indicate quality in a credible way since often this implies to monitor the production process. Trace-back systems are required to maintain the ability to trace a product back through the production process to its origin. Traceability of the production process requires complex and expensive mechanisms to monitor supply chains of food products. They become more complex and expensive as long as products travel over long distances, through more hands and countries with different quality standards to comply with. Sometimes they may require public intervention that has a cost for society.

4.3 European Answer: Designations of Origin

EU answer to consumers' increasing concerns on one hand and to rural and environmental issues on the other one, has been to

apply ‘new-economy’ principles⁴¹ to agriculture, establishing a system of trademarks and labeling that adds value to products and creates monopoly rents whose beneficiary will be the family-farm otherwise condemned to extinction⁴². In order to implement this model the concept of excludability is needed. Property rights have to be established and patents and brand names have to be issued through regulations.

Complex and costly logistic and monitoring instruments are then required in order to ensure the system working properly. Higher costs due to monitoring needs, reflect into the amount of the premiums paid by consumers. The risk is represented by opportunistic behavior of a small number of agents (free-riders) that willingly or accidentally misuse a brand name. The phenomenon of free-riding and the consequent quality erosion are particularly dangerous because they undermine consumers’ trust and willingness to pay and per consequence they dilute the economic rents of branding itself. For this reason enforcement mechanisms and penalties have to be designed by regulations. Advertising then adds value to the brand name by enhancing consumers’ awareness, securing their loyalty and improving market share.

This is exactly the process that EU has initiated in the ‘90s with the 1992 MacSherry reforms of the CAP through regulations on denominations of origin (PDO, PGI and TSG) and on organic farming.

PDO, PGI and TSG

In July 1992 EU introduced legislation on the protection of geographical indications and designations of origin for agricultural products and foodstuffs through EEC Council Regulation N° 2081/92 and N° 2082/92 that established Protected Designation of Origin (PDO), Protected Geographical Indication (PGI) and Traditional Specialty Guarantee (TSG). PDO can be granted to agricultural foodstuffs produced, processed and prepared in a given geographical area using recognized know-how for which both the

⁴¹ P.A. Yotopoulos, “ Is there a third way for mediterranean agriculture?”, in *Politica Agricola Internazionale*, Vol.1, July 2002

⁴² Cfr Chapter I – Schultz’s model

micro-environment of origin and the processing are controlled. PGI are granted to products of good reputation for which the geographical link must occur in at least one of the stages of production, processing or preparation of the food and its features/quality can be attributable to that geographic area. TSG is granted to indicate a traditional technique that is associated with the production of an output and does not refer to the origin but highlights traditional character, either in the composition or means of production.

To each of these denominations is associated a logo with the aim:

- o to help consumers in their choices by giving them information concerning the specific character of the products;
- o to protect product names from misuse and imitation;
- o to add value to products creating rents for producers thus encouraging diverse agricultural production.

In order to go about registering a product name, producers and processors must define the product according to precise specifications and apply to the relevant national authority: After a first study, the competence will pass to the Commission where the application will undergo a number of further control procedures. If the product meets the requirements and there are no objections, the European Commission publishes the protected product name in the Official Journal of the European Communities.

To maintain granted labels, production processes have to be continuously assessed through controls procedures and quality exams. This quality assurance mechanism is based on documentation of production processes and practices and on third-party auditing and certification.

Since 1992 EU countries have been active in securing the 'protected' designations for a wide variety of products. In table 1 categories involved in PDO/PGI designations of origin are summarized with the total number of designations granted for each

category and the respective share of the country with the largest number of designations⁴³:

Table 1 – PDO/PGI Statistics

<i>CATEGORY</i>	<i>TOTAL</i>	<i>FIRST COUNTRY</i>
Cheeses	154	France (42)
Meat based products	75	Italy (27)
Fresh meat	101	France (50)
Fresh fish, molluscs, crustaceans and derived products	9	UK(3)
Other products of animal origin	19	Portugal (10)
Oils and fats, olive oils	89	Italy (36)
Table olives	16	Greece (10)
Fruits, vegetables and cereals	139	Italy (40)
Bread, pastry, cakes and confectionery	17	Spain (6)
Beers	18	Germany (12)
Other drinks	39	Germany (31)
Non food products	9	Greece (4)
Spices	4	Italy/Spain(2)

⁴³ All data have been found in EU Website, Agriculture section, 2003

Table 2 – TSG Statistics

<i>CATEGORY</i>	<i>TOTAL</i>	<i>FIRST COUNTRY</i>
Cheeses	2	Italy/Sweden
Meat based products	2	Spain/Sweden
Fresh meat	1	UK
Fresh fish, molluscs, crustaceans and derived products	-	-
Other products of animal origin	1	Spain
Oils and fats, olive oils	-	-
Table olives	-	-
Fruits, vegetables and cereals	-	-
Bread, pastry, cakes and confectionery	3	Finland (2)
Beers	7	Belgium(6)
Other drinks	-	-
Non food products	-	-
Spices	-	-

By March 2005, 689 products had been granted the right to use PGI or PDO labels (16 for TSG). Mediterranean countries have been the most active in PDO/PGI registrations particularly in the categories of cheese, meat products, fruits and vegetables, and olive oil. Major countries benefiting from the regulation are France and Italy (21% each of granted labels), Portugal (14%), Greece (13%), Spain (11%).

In Italy designations have been granted mostly for meat based products, olive oils and fruits and vegetables; in France for

cheeses and fresh meat; in Germany the majority of PGI/PDO products are local breads, beers and other drinks.

Many of the products that were first granted PGI/PDO labels were generally already well known by consumers at national and international levels and often they were also granted by similar labels by their own countries (Italy DOC and DOP and France Label Rouge). For others the labelling came only on the basis of the opportunity given by EU regulation. The value of these products compared to total agricultural turnover is likely to increase⁴⁴.

A successful case: Parmesan cheese and Italian DOC/DOP system

Parmiggiano-Reggiano cheese was one of the first Italian cheeses to be awarded the Italian denomination of controlled origin (DOC) title introduced by Italian law n.125 of April 1954. According to this law the brand-name Parmiggiano-Reggiano is applied exclusively to cheese produced in the provinces of Parma, Reggio Emilia, Modena, Mantova and Bologna and aged for minimum 12 months. Since 1996 the brand Parmiggiano-Reggiano has also been registered as a PDO by the EU and it is recognised around the world as one of the finest high-quality Italian food products. The leadership role in Parmesan cheese supply chain is played by an association of producers called Consorzio di Tutela del Parmiggiano Reggiano (CTPR). It plays several functions including traditional functions associated with the enforcement of technical requirements (such as grading milk to evaluate whether it meets the standards for Parmesan cheese and inspections to ensure that trademarks are applied to the wheels of Parmiggiano according to the norms and procedures set forth in the specific regulations). It also plays other more innovative and strategic functions such as R&D, quality assurance, promotion and the provision of consumer information. Parmiggiano cheese sells at a considerable premium (nearly 50%) over the price of competing cheeses.

Parmesan cheese successful case demonstrates how:

⁴⁴ Nomisma, 2000

- o labels can be used to make traditional products survive in spite of fierce agricultural competition, protecting cultural traditions and preserving rural values;
- o a complex supply chain mechanism based on the tool of a consortium may assure the quality attributes and the authenticity of geographic origins and traditional methods of production granted by labels.

Another successful case: French Label Rouge

Another example of successful system in Europe is the French Label Rouge system that is a French national programme for food quality assurance that differentiates products of artisanal farming with a well defined geographical origin from industrial products. It is consistent with PGI designation and in fact EU treats Label Rouge as a form of PGI. Label Rouge yet goes beyond PGI itself since it places greater emphasis on branding, product promotion, high quality with respect to taste and appearance, safety and wholesomeness and for the environmentally practices used in producing them. The poultry sector serves as an excellent example of the Label Rouge approach⁴⁵ as it is also attested by figures on PGI French designations in fresh meat category.

It is noteworthy that, with the exception of organic standards, farm level quality assurance systems have been slow to develop in the US where there is little tradition of food products with a strong geographic identity.

4.4 European Answer: Organic Farming

The sustainability of both agriculture and the environment is a key concern and therefore a policy objective of today's CAP. As a consequence, farmers, consumers and policy makers have shown a renewed interest in organic farming. Organic farming is viewed as part of a sustainable farming system and a viable alternative to the more traditional approaches to agriculture.

⁴⁵ Westgren (1994, 1999)

EU rules on organic farming came into force in 1992. Regulation (EEC) 2092/91 created a framework that sets the requirements for agricultural products or foodstuffs grown with organic production methods. EU Regulation defines the method of agricultural production for crops and livestock, regulate the labelling, processing, inspection and marketing of organic products within the EU. The deriving logo, like PDO/PGI, has the double aim to help consumers to make conscious choices and to protect the economic rents accruing to farmers. The Regulation states that organic production may be referred to only when the product in question has been obtained and tested in accordance with the rules established therein, and in particular that it contains only substances listed in the Annexes and it has not been subjected to treatments involving the use of ionizing radiation.

Since 1992 tens of thousands of farms have been converted to this system, as a result of increased consumer awareness of, and demand for, organically grown products. The impetus for this growth has been also caused by the price premium of its products gain, often more than 100 percent of the price of the conventional product⁴⁶. The side benefits of this improved profitability are both higher labour intensity and higher returns to labour in organic production.

The number of farms devoted to organic agriculture has grown from 6300 in 1985 to more than 100,000 in 1998⁴⁷. Although it only represented around 3 % of the total EU utilised agricultural area in 2000, organic farming has in fact developed into one of the most dynamic agricultural sectors in the European Union. The organic farm sector grew by about 25% a year between 1993 and 1998 and, since 1998, is estimated to have grown by around 30 % a year⁴⁸. The potential for organic products in the future is very likely to be at the level of around 15%⁴⁹.

⁴⁶ P.A. Yotopoulos, “ Is there a third way for mediterranean agriculture?”, in *Politica Agricola Internazionale*, Vol.1, July 2002

⁴⁷ Yotopoulos, Ibidem

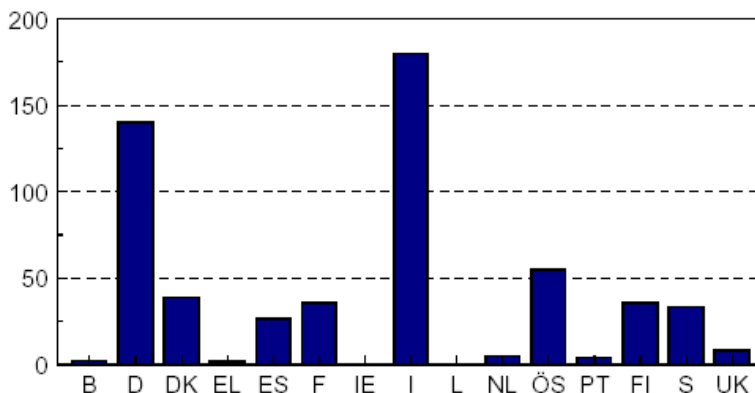
⁴⁸ EU Website, Agriculture section, 2003

⁴⁹ Fischler speech, EU website on agriculture, 2003

Italy ranks first in Europe in terms of agricultural surface cultivated organically and the number of both surface and organic producers is constantly increasing. The total area under organic farming (including conversion farms) is about 1,000,000 ha, corresponding to 7,2% of the total cultivated area for the year 2000 and the total number of operators was 49.188 in 1999 and 51.552 at the end of 2000. Two regions, Sicily and Sardinia, account about for 50% of the Italian total organic farmed area. The main crops are forages (402.086 ha), cereals (194.616 ha), pastures (156.826 ha), followed by olive, vineyard, fruits (19%), other industrial crops (6%)⁵⁰.

Italy is followed by Germany, Austria, Spain, France and UK for that concerns organic arable area⁵¹ as it can be seen in Figure 2.

Figure 2 – Organic arable land in 1998 (000 ha)



The first organic products in EU are cereals, in North Europe animal breeding and milk production is increasing, whereas South Europe offers more fresh (fruits and vegetables) or transformed organic products (wine, oil, pasta, cheese).

⁵⁰ Seminar on Organic Farming Research in Europe, Brussels, 24-25 September 2002.

⁵¹ EU organic farming statistics, 2001

Organic farming is practiced also outside EU in almost all countries of the world, and its share of agricultural land and farms is increasing everywhere. EU share on total world organic land area updated to 1998 amount to 24% coming second only to Oceania leading the list with 48%. Organic farming is not only a European solution to the problem of agricultural sustainability. A common understanding of the phenomenon and a harmonized action at world level using international institutions such as WTO, would be advisable.

5 –EU and Value Added Agriculture: Agri-Tourism

5.1 The Marketability of Public Goods/Positive Externalities

Policy instruments intended to address market failures related to the production of positive/negative externalities due to agricultural activity can be summarized in the following three types (as already mentioned in the third chapter):

1. Mandatory regulations
2. Financial/economic interventions by the public sector
3. Market creation for public goods/externalities

The first type encompasses all legally binding instruments already mentioned. The second type has already been discussed in the third chapter. The third and last type of policy consists of transformation and development of positive externalities into marketable private products. It is envisaged particularly by the EU and its Member States as a means to increase the provision of public externalities and to create additional incomes for farmers. In some circumstances may exist possibilities to transform positive externalities/public goods into marketable private goods. To the extent that positive externalities/public goods deriving from agricultural activity can be privatised directly or used as inputs in the production of other private goods and services, the market approach reaches its full extent and potentials. Cases are now emerging all over Europe under different situations, institutions, managerial skills and organizational structures. This approach must be seen in the context of the appropriate policy mix and area packages of measures, including regulatory and financial means.

As mentioned in the third chapter, goods can be defined in terms of rivalry and excludability. Pure public goods are non rival and non excludable in consumption. On the contrary pure private goods are fully rival and excludable. The kind of goods produced along with the production of agricultural commodities present the characteristics of public goods since they imply low excludability

and low rivalry. Not necessarily the level of excludability and rivalry should always be zero, but it can vary according to the institutional context, to the local customs and to the nature itself of the particular good considered. In this case goods can be defined as mixed impure public goods.

The policy to create markets for public goods/externalities is based on the 'Beneficiary Pays Principle' stating that the one who benefits from a service or a good has to pay for it. The principle leaves the problem of how much he should pay unresolved. According to many studies put forward around Europe, a high willingness to pay for positive externalities from users has emerged. In a review of case studies from various countries⁵², the 'State Pays Approach' results to be the most used around Europe along with the application of the 'Provide Gets Principle' asserting that the producer of a good or service must be compensated for it (farmers)⁵³, but a very little use of the 'Beneficiary Pays Approach' has been made.

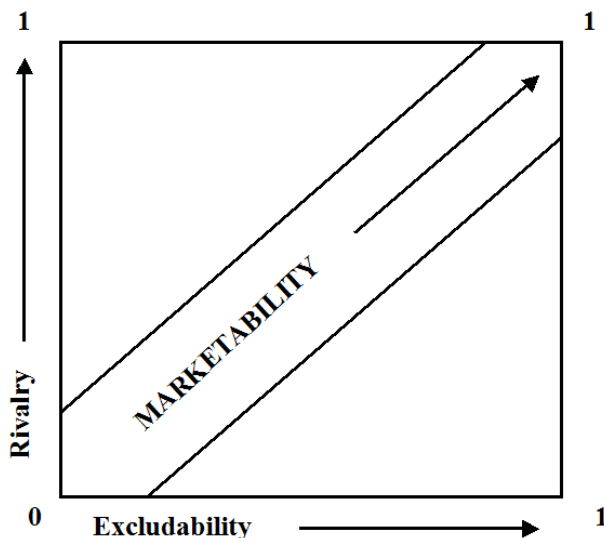
Marketability of public goods implies the shift to the 'Beneficiary Pays Approach' and can be drawn by using the excludability/rivalry diagram depicting an arrow going from public to private goods which is called 'marketability arrow'⁵⁴. This process consists of applying to public goods, marketing tools in order to increase the level of excludability and rivalry. The marketability arrow can be drawn as in Figure 3.

⁵² Hanley, 1995

⁵³ The two principles are complementary since the first one states who should pay for services and the second one who should be paid for the provision of services.

⁵⁴ Introduces by Ferro et al., 1995 and Mantau, 1995

Figure 3 – The Marketability arrow



The transformation of public goods into marketable goods can be divided into two stages: the first concerning institutional factors (legal status and property rights, planning and permissions, contractual arrangements, etc); the second concerning development of management and marketing schemes and the provision of complementary/additional goods and services, as well as promotion and information. They can be seen as the two components of the marketability arrow.

Institutional factors include legislative changes (e.g. the Italian law on mushrooms picking obliging pickers to buy a permit or EU Regulations on product origin certification obliging producers to get approval and follow a code of practice); planning changes in the field of land use and environment including zoning and the designations of parks and protected areas; administrative changes implying licenses and other regulations. These measures represent the first step towards the transformation process into marketable

goods and build the base for further transformation. Thereafter management and market developments make possible the continuation of the transformation process and make up the core for the development. They consist of creating complementary equipment and infrastructure that provide additional value and therefore represent the final step for reaching a market value. The availability of additional goods and services is necessary to create a market for positive externalities and often are those additional products that are paid for in the market. Efficient agri-environmental policies require both tools and measures: mandatory legally binding tools should be applied together with economic-financial incentives and marketing tools.

Measures undertaken to enforce excludability are aimed at regulation of access and exclusion of free-riding. Their applicability depends upon the nature of the good itself: products like bike access to forest roads or mushroom picking need strict controls to be regulated and to prevent free-riding. Rivalry instead depends to a certain extent upon congestion since too many users decrease the enjoyment of the good. Interventions can be targeted both at promoting access and use, attracting a larger number of users, increasing congestion and decreasing rivalry or at regulating access to the use of goods through measures such as zoning, entrance fees and permits that reduce congestion and, at the same time, increase rivalry.

A possible example of transformation of public into private goods is agri-tourism where the application of the marketability process is particularly evident in the creation of additional recreational services. Consumers are willing to pay for those additional services that have the nature of private goods since they are excludable and rival. Simultaneously they pay also for positive externalities according to the 'Beneficiary Pays Principle'. The multi-product agriculture sells commodities plus tourism services in one package.

5.2 Rural Tourism

In all developed countries agriculture represents a declining sector with decreasing share on national employment and GDP. In contrast to this downturn, tourism presents a picture of thriving growth into a prosperous, fast-growing activity, and it has indeed turned out to be a significant factor for economic growth in the countries in which it has developed and a way to transfer capital, income and employment from industrial, urban areas to non-industrialized regions.

Rural tourism is the result of the attempt to exploit tourism's growth potential to enhance rural development. The outcome is a complex multi-faceted activity whose proper definition is difficult to find. However it is possible to identify some essential characteristics of rural tourism. First of all it has to be located on rural sparsely populated areas. Then it has to be built on rural characteristics such as open space, contact with nature and traditional societies and practices. It has to be based on small scale enterprises. It has to reflect only local resources capabilities and be sustainable in their use, and it should respect the rural character of the area rather than urbanizing it. It can include farm-based holidays but also special interest nature holidays and eco-tourism, walking, climbing and riding holidays, adventure, sport and health tourism, hunting and angling, educational travel, arts and heritage tourism, food and wine related tourism and, in some areas, ethnic tourism.

An increasing number of visitors are involved in many OECD countries in those types of holidays⁵⁵. Beyond the increased levels of education, the higher availability in leisure time and in disposable income; the improvement in transport and communications that contributed to the growth of the world tourism in general, other factors such as increased interests in outdoor recreation and eco-tourism; green issues deeper awareness; increased health consciousness; growing attention towards rural heritages, landscapes, artifacts; major need of authenticity, peace and relax; and

⁵⁵ OECD, "Tourism strategies and rural development", 1994

growing concerns for high quality food have been responsible for the expansion of such kind of tourism.

Rural tourism fits perfectly in the framework of the second pillar of the CAP devoted to rural development policies (Reg EC n. 1257/99, n.1260/1999 and n.1750/1999). European consumers are well aware of their rural roots and cultural heritage of rural areas, they are particularly sensitive to traditions, culture and values of rural life and pay particular attention to the importance of rural landscapes and natural environment that they increasingly consider public goods.

Exploiting consumers' willingness to pay for rural tourism services represents one possible way, along with public support, to provide public goods such as the preservation of rural communities and the viability of rural economies; forestry, landscape and environment conservation; maintenance of rural traditions, culture and values. Rural tourism therefore may contribute to the achievement of the societal goals of rural development policies through its potential to retain and create jobs and skills in marginalized regions; to support rural arts and craft; to inject entrepreneurial dynamism and vitality into weakened economies; to transfer incomes and capital from industrialized to rural areas.

While many benefits can flow from rural tourism development, there can be problems too. Rural tourism may pose environmental and socio-cultural threats to the rural traditional lifestyle and it may bring traffic congestion and increased urbanization. In addition, the lack of local appropriate tourism management competences both at enterprise and public levels may imply entrepreneurs coming from outside, being insensitive to local traditions and repatriating profits. The issue is how a sustainable form of rural tourism can be developed retaining the intrinsic values of the countryside; how to ensure the long-term profitability of the tourism industry without letting tourism to become the only dominant activity. The aim of any tourism strategy should be to assist the balanced development of an area, not to convert it into a resort complex dependent solely on the travel trade. Sustainability should always be born in mind. Tourism development should be

carefully planned and properly managed so as to take into consideration the carrying capacity of the site with regard to environmental, social and economic impacts. Appropriate rural tourism development strategies have to be defined at a public level. Public sector's regulatory and coordinating role will continue to be a powerful one, even if private sector involvement should be widely stimulated.

5.3 Farm Tourism

Farm tourism is a particular type of rural tourism that takes place on farms and is managed essentially by farmers. It provides additional income to farmers through the supply of additional non-farm services including accommodation of all kinds, catering services based on farm produced food, sales of farm products directly to consumers, educational initiatives to provide visitors with learning experiences and development of farm-related other attractions. All those activities contribute to increased economic stability of farmers diversifying their sources of income and adding value to their production.

Diversification of activities to provide alternative incomes is a complex process that requires farmers to acquire new technical and economic skills quite far from their basic occupation. These new activities also imply improvement of the existing infrastructures, endowment of new equipments and ability to accommodate tourists and to provide quality integrated services for them. In addition, because of the fragmentation of the supply, synergies between the enterprise and the public or semi-public levels are required in order to improve integration on the territory and to implement a coherent strategy. Efficient services of booking, communication, marketing, promotion and supply segmentation will have to be provided.

Not all rural tourism is farm tourism. Farm tourism can be considered one aspect among many of rural tourism. Nevertheless EU legislation does not make any differentiation between rural and farm tourism and it does not provide specific disciplines for the latter.

Farm tourism is not so widespread in OECD countries. For example, over large parts of Eastern England, Sweden, Canada and the United States farm tourism is poorly developed.⁵⁶ Many farms are unsuitable for intensive tourism development because they can be distant from urban holiday market; they can be medium-large sized farms that do not need to diversify their activities or, on the contrary, they can be very poor and very small farms with no surplus accommodation; they may lack scenic or heritage attractions; they may be deficient of marketing skills, infrastructure provisions, tradition of co-operation between farmers, or between farmers and governmental agencies. It follows that not always and not everywhere this instrument can be considered able to increase farmers' income and to keep viability of rural activities.

In other areas instead the path towards a positive evolution of context that otherwise would be abandoned and/or socio-economically marginalized may pass through the exploitation of farm tourism potential.

In the following section a specific case of farm tourism will be presented: the Italian 'agriturismo'. The strategic planning activity at public level, the legislation specifically addressed to the sector, the coordination between national, regional and local authorities and between public/semi-public agencies and private enterprises, the richness in terms of rural traditions and values, landscapes and natural environments, the variety of food specificities and the readiness of domestic tourists to choose this particular form of tourism, have been all factors that contributed to make it a successful case.

5.4 The Case of Italian 'Agriturismo'

Italian legislation on 'agriturismo' is based both on the European framework and on national specific legislation. Reg EC n. 1257/99 on rural policies and Commission Communication COM/90/438/1990 on rural tourism development represent the main

⁵⁶ OECD, 1994

references at European level. As already mentioned there is no specific legislation on farm tourism.

On the contrary Italian law is focused on the concept of 'agriturismo' as a specific rural tourism activity. Drawing a line between rural and farm tourism in Italy is due to the need to properly identifying farm tourism agents in order to address them fiscal and other economic and financial incentives.

According to L. n. 730/1985, 'agriturismo' is a specific form of rural tourism providing accommodations and other services to consumers that can be carried out only by farmers or their families, within the context of their farms, using farm related infrastructures. It has to be strictly associated to farming activities that should always remain dominant. The relationship dominant/subsidiary has to be determined not only with respect to the revenues, but also to the quantity of work implied. 'Agriturismo' can not exist outside farms, nor tourism activities can prevail and become dominant on farm activities. Any other activity not compliant with the above mentioned criteria can not be considered 'agriturismo'. It has to be considered rural tourism and as such it is not subject to the same legislation.

The law n. 412/1991 recognizes a special fiscal regime for 'agriturismo' providing particular fiscal benefits.

National framework is complemented by an array of regional laws that often are very different from each other and are continuously updated. They add to national legislation other more specific criteria to better define agri-tourism taking into account specific regional and local characteristics of the territory.

National framework has been updated through the Law 15/06/2001 on the modernization of the agricultural sector. It introduces some innovations in the previous scheme for that concerns the criteria to define the associated to farming activities and the allowed selling activities. Can be considered farming associated activities those that use products/services mainly obtained through farming activities/rural infrastructures. Can be considered allowed selling activities, those that involve products obtained prominently by own farms. Farmers are allowed to sell those products throughout the entire Italian territory directly to consumers. The new law

broadens the scope of agri-tourism activities favouring the multifunctionality of agriculture and the process of diversification and enhancement of farmers' incomes.

The legislative framework is completed by the legislation on contiguous activities (production and packaging of agro-food products; maintenance of rural infrastructures and buildings; environmental regulations) and by the laws for the destination of structural funds.

Supply of agri-tourism services

In order to better understand the phenomenon and its trends some data are provided:

Table 3 : Trend for units and beds per year

YEARS	UNITS	BEDS
1997	4.813	54.098
1998	5.275	59.024
1999	5.965	68.413
2000	6.816	77.171
2001	7.769	90.711

Growth of supply is attested by numbers: in 1997 there were less than 5.000 agri-tourisms while in 2001 they were almost 8.000 with a bed increase from 54.000 to nearly 100.000⁵⁷. If to this figure we add the number of farms with catering services we obtain almost 10.000 agri-tourisms. In the year 2000 turnover has been of €900 million⁵⁸ registering an increase of 12,5% compared to the previous year⁵⁹.

⁵⁷ ISTAT, 2001

⁵⁸ This figure may vary broadly according to the inclusion or not of catering services.

⁵⁹ Terranostra (Col diretti), Estimates, 2000

Also the sector of refreshing-services presents a positive trend both in terms of number of firms and number of table seats.

Northern and central regions have the major share and are also more dynamic in terms of innovations with Tuscany being the leader both for number of units and number of beds. Then Trentino Alto Adige, Umbria, Veneto, Lombardia and Emilia Romagna follow. Other central and southern regions are growing in the last years (Table 4).

Table 4 : Consistency of units and beds per area

AREAS (2001)	UNITS	BEDS
North	3.194	31.543
Centre	3.392	43.880
South	1.183	15.288
Leader (Tuscany)	1.927	26.173

Table 5 : Arrivals and presences per country of origin

Countries of origin (2001)	Arrivals (thousands)	Presences (thousands)
Italy	475	2.136
UE	784	4.281
Other Europeans	26	159
Extra UE	40	231
Total Foreign	375	2.535
TOTAL GENERAL	850	4.671

Italian arrivals are still predominant while for that concerns presences European exhibit the largest numbers. Average stay was 6,8 days for foreigners while 4,8 for Italians with a resulting total average of 5,8 days (Table 5)⁶⁰.

Situation that emerges from these data is clearly positive. Growth has been evident both for revenues and numbers of operators. It is possible to affirm that 'agriturismo' has registered a boom in the last years positively and crucially contributing to increasing farmers' incomes.

To answer to the increasing challenges, supply is evolving towards more qualified and complex services besides traditional ones (accommodation and refreshment). In particular the positive trend of traditional and regional agri-food and wines patterns has been increasingly exploited. Moreover cultural traditions and local folklore, recreational and sport occasions, stage and conventions represent all opportunities to capitalize in order to attract consumers and increasingly satisfy their needs and to add further services they may be willing to pay for.

Strenghts and weaknesses

Italian successful experience is due to an array of factors:

- o Good level of integration between small city centres and countryside;
- o Good potential of integration with consolidated tourism circuits;
- o Wide array of services provided;
- o Widespread and diversified natural and cultural resources;
- o Professional tour operators increasingly interested in the activities;
- o Clear legislative framework providing incentives and benefits for farmers while ensuring the respect of diversity through integration between national and regional approaches;

⁶⁰ ISTAT, 2001

- o Good level of coordination and cooperation between public or semi-public agencies and private entrepreneurs.

But the most crucial factor for the success of the Italian experience is mainly related to the attention for quality. Quality intended both as mandatory and non mandatory. The first one is mandatory in the sense that it is imposed by law. The second one is determined by customer expectations and represents the most important key to success. In order to certificate non mandatory quality and to signal it to customers, some regions have elaborated and implemented a system of classification of the agri-tourism supply, based on the services provided and their characteristics. This helps not only in terms of transparency of the market, but also it helps in regulating competition and in satisfying different consumer targets. Further steps in this direction could be the adoption of codes of behavior, quality trademarks, quality certifications, or participation to quality circuits.

How do Italians judge the quality of agri-turism services?

In the following table 6 some results are provided based on an Eurispes survey⁶¹:

Table 6 : Eurispes Survey Results on Agri-Tourism Consumers' Satisfaction

	<i>Optimum</i> <i>(%)</i>	<i>Satisfying</i> <i>(%)</i>	<i>Negative</i> <i>(%)</i>	<i>Uncertain</i> <i>(%)</i>
Accommodation	18,18	77,27	4	0,55
Hygienic services	27	68,2	4,8	-
Cookery	55	41	4	-
Farm products	60	31	4,5	4,5
Recreational activities	5	81	4	10

⁶¹ Italy Report 2000, Eurispes

Compared with previous years results, it is possible to assert that on average, satisfaction has increased and this could mean that the average quality in the sector has also increased.

In spite of its success, Italian 'agriturismo' has still to cope with some weaknesses related to the very fragmented nature of the activity that involves difficulties in coordination among agents and to the influence of seasonality. In addition some points of dissatisfaction are still experienced by consumers with the level of service (insufficient precision in booking activity, not truthful descriptions of accommodation and related services, bad maintenance of the infrastructures, insufficient contact with farming activities).

'Agriturismo' should also pay particular attention to enhance the variety of its territory in order to preserve diversity and to avoid standardization. When numbers increase quite fast, one of the possible risks is to incur in standardization and lose of quality. Varieties can be promoted at different levels: environment and landscape; food and other agricultural traditional products; farms styles and architectures; the supply of additional recreational activities. Enhancing varieties at all levels contribute to the shaping of identities and to the consolidation of the quality process. All these issues have to be addressed in order to consolidate success of the Italian experience.

The Main Challenge for Italian 'Agriturismo'

Legislative framework fits perfectly with the concepts of multifunctional agriculture. It indeed creates opportunities for diversification of farming activities and for increases in farmers' incomes and employment, through the creation of value-added services/products that can be marketed and directly bought by consumers.

The main challenge for agri-tourism is to produce its main output of food striving at the same time to find the balance between tradition and innovation; rural lifestyle and complex managerial skills; diversity and coordination; traditional products and standards

of quality/safety of food; maintenance of landscape and environment and provision of accommodations and comfortable services.

‘Agriturismo’ has the objective to revitalize rural heritage and culture, maintaining agricultural production and skills along with rural viability, landscape and environment.

In the attainment of the multiple objectives of multifunctionality, agri-tourism can be considered an important tool only if it can demonstrate that it is able to correct disequilibria in farm sector and to represent a bridge between agriculture and tourism. Growth in dimension can carry the risk to make agriculture lose its nature of subsidiary activity becoming increasingly part of the tourism sector more than the primary one. This is the real challenge that Italian ‘agriturismo’ is currently facing. After having demonstrated its economic viability and ability not only to self-sustain itself but also to expand, it will also have to demonstrate that it has not lost its original nature and objectives and it has not transformed itself into a simple provider of normal tourist services.

Results will depend only in part from legislation, but mostly on the ability and willingness of farmers to become guardians of rural tradition and lifestyle and real providers of multifunctional services. It is too soon anyway to express a definitive judgement on it.

6 - Conclusions

EU position in WTO international negotiations is aimed at avoiding the extinction of European agriculture. The risk of EU agriculture to disappear has, in fact, huge costs in terms of rural unemployment, disruption of rural life and traditions, breaking up of social cohesion, depopulation in marginalized regions, negative environmental impacts, loss of cultural heritage and rural landscapes. The gains from freer trade risk to be outweighed by the losses in terms of multifunctional goods.

This implies that the trade-off must be settled between European agriculture survival and respecting the liberal paradigm of free trade in the agricultural markets.

Europe has found the answer to this apparently uncompromising dilemma. EU answer is based on the concepts of:

- o multifunctionality of agriculture that implies recognition of the services (public goods/positive externalities) provided by farmers along with food production and that justifies public domestic support;
- o maximization of the value of the output produced by farmers through the creation of monopoly rents in the forms of trademarks and labels and through diversification of activities in order to create new sources of income and employment for farmers.

The future of agriculture is closely linked to the balanced development of the countryside, which accounts for 80% of the area of Europe. Alongside the market support measures, the European rural development policy plays a major role in economic, social and territorial cohesion. It is based on the following principles: recognising the multifunctional role of agriculture, improving competitiveness, ensuring that environmental issues are taken into account, diversifying economic activity, conserving rural heritage.

Europe is taking the lead in showing how agriculture can play the dual role as a provider of both food and rural environmental and cultural services. European society is well aware of its rural roots

and values and of the natural environment and cultural heritage of rural areas. Now it has been realised that not only must there be specific public actions to protect natural resources and enhance the environment, but that these actions must be integrated with other dimensions of agricultural and rural policy.

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